

Claims

1. A method for a base site to provide a dispatch patch service to a communication unit in a CDMA communication system, the method comprising the steps of:
- 5 encoding dispatch communication for a dispatch call using a first CDMA long-code mask;
- receiving a request to patch a dispatch target into the dispatch call from the communication unit, wherein, prior to the step of
- 10 receiving, the dispatch call does not involve the dispatch target and the first CDMA long-code mask is used for encoding dispatch communication for the dispatch call; and
- transmitting a channel assignment to the dispatch target that indicates the first CDMA long-code mask.
- 15 2. The method of claim 1 further comprising the steps of:
- transmitting CDMA long-code mask update information to the communication unit;
- generating a second CDMA long-code mask using the first CDMA
- 20 long-code mask and a dispatch identifier of the dispatch target; and
- encoding dispatch communication for the dispatch call using the second CDMA long-code mask.
- 25 3. The method of claim 1 further comprising the step of transmitting a dispatch page to the dispatch target.
4. The method of claim 2 wherein the dispatch call is a group dispatch call.
- 30 5. The method of claim 2 wherein the dispatch call is an individual dispatch call.

6. The method of claim 2 wherein the dispatch target is a dispatch group.

7. The method of claim 2 wherein the dispatch target is a dispatch individual.

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8. The method of claim 2 wherein the dispatch identifier of the dispatch target comprises a dispatch group identifier of the dispatch group associated with the dispatch target.

10 9. The method of claim 2 wherein the dispatch identifier of the dispatch target comprises a dispatch individual identifier of the dispatch target.

10. The method of claim 2 wherein the channel assignment indicates a traffic channel associated with the dispatch call prior to the step of receiving.

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11. A method for a communication unit to invoke a dispatch patch service from a base site in a CDMA communication system, the method comprising the steps of:

5 decoding, by the communication unit, dispatch communication for a
 dispatch call using a CDMA long-code mask;
 transmitting, by the communication unit, a request to patch a dispatch
 target into the dispatch call, wherein the dispatch call does not
 involve the dispatch target prior to the step of transmitting;
10 receiving, by the communication unit, CDMA long-code mask update
 information; and
 decoding, by the communication unit subsequent to the step of
 transmitting, dispatch communication for the dispatch call using
 an updated CDMA long-code mask, wherein the dispatch call
15 involves at least the communication unit and the dispatch
 target.

12. The method of claim 11 wherein the CDMA long-code mask update information is the updated CDMA long-code mask.

20 13. The method of claim 11 further comprising the step of updating the
CDMA long-code mask using the CDMA long-code mask update information
to produce the updated CDMA long-code mask.

25 14. The method of claim 13 wherein the CDMA long-code mask update
information comprises a dispatch identifier of the dispatch target.

15. The method of claim 11 further comprising the step of receiving, by the
communication unit, information about the dispatch target.

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16. A method for a communication unit to be patched into a dispatch call in a CDMA communication system, the method comprising the steps of:

receiving, by the communication unit, a dispatch page for the dispatch call;

5 receiving, by the communication unit, a channel assignment that indicates a first CDMA long-code mask used for the dispatch call prior to the step of receiving the dispatch page;

generating, by the communication unit, a second CDMA long-code mask using the first CDMA long-code mask and a dispatch
10 identifier of the communication unit; and

decoding, by the communication unit, dispatch communication for the dispatch call using the second CDMA long-code mask.

17. The method of claim 16 wherein the dispatch identifier of the
15 communication unit comprises a dispatch group identifier of the dispatch group associated with the communication unit.

18. The method of claim 16 wherein the dispatch identifier of the
20 communication unit comprises a dispatch individual identifier of the communication unit.

19. A base site comprising:
- a processor capable of encoding dispatch communication for a dispatch call using a first CDMA long-code mask;
 - a receiver capable of receiving a request to patch a dispatch target into the dispatch call from a communication unit, wherein, prior to the receiver receiving the request, the dispatch call does not involve the dispatch target and the first CDMA long-code mask is used for encoding dispatch communication for the dispatch call; and
 - a transmitter capable of transmitting, when instructed to transmit by the processor, a channel assignment to the dispatch target that indicates the first CDMA long-code mask.
20. The base site of claim 19 wherein the transmitter is further capable of transmitting CDMA long-code mask update information to the communication unit when instructed to by the processor and wherein the processor is further capable of generating a second CDMA long-code mask using the first CDMA long-code mask and a dispatch identifier of the dispatch target and capable of encoding dispatch communication for the dispatch call using the second CDMA long-code mask.

21. A communication unit comprising:

a processor capable of decoding dispatch communication for a dispatch call using a CDMA long-code mask, capable of instructing the transmitter to transmit a request to patch a dispatch target into the dispatch call, wherein the dispatch call does not involve the dispatch target prior to instructing the transmitter to transmit the request to patch, and capable of decoding, subsequent to instructing the transmitter to transmit the request to patch, dispatch communication for the dispatch call using an updated CDMA long-code mask for the dispatch call, wherein the dispatch call involves at least the communication unit and the dispatch target;

a transmitter capable of transmitting the request to patch; and

a receiver capable of receiving CDMA long-code mask update information used to generate the updated CDMA long-code mask.

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Country	Year	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)
Algeria	1975	10.0	4.0	40.0	100	400
Algeria	1980	10.5	4.5	42.9	110	450
Algeria	1985	11.0	5.0	45.5	120	500
Algeria	1990	11.5	5.5	47.8	130	550
Algeria	1995	12.0	6.0	50.0	140	600
Algeria	2000	12.5	6.5	52.0	150	650
Algeria	2005	13.0	7.0	53.8	160	700
Algeria	2010	13.5	7.5	55.6	170	750
Algeria	2015	14.0	8.0	57.1	180	800
Algeria	2020	14.5	8.5	58.6	190	850
Algeria	2025	15.0	9.0	60.0	200	900
Algeria	2030	15.5	9.5	61.3	210	950
Algeria	2035	16.0	10.0	62.5	220	1000
Algeria	2040	16.5	10.5	63.6	230	1050
Algeria	2045	17.0	11.0	64.7	240	1100
Algeria	2050	17.5	11.5	65.7	250	1150
Algeria	2055	18.0	12.0	66.7	260	1200
Algeria	2060	18.5	12.5	67.6	270	1250
Algeria	2065	19.0	13.0	68.4	280	1300
Algeria	2070	19.5	13.5	69.2	290	1350
Algeria	2075	20.0	14.0	70.0	300	1400
Algeria	2080	20.5	14.5	70.7	310	1450
Algeria	2085	21.0	15.0	71.4	320	1500
Algeria	2090	21.5	15.5	72.1	330	1550
Algeria	2095	22.0	16.0	72.7	340	1600
Algeria	2100	22.5	16.5	73.3	350	1650
Algeria	2105	23.0	17.0	73.9	360	1700
Algeria	2110	23.5	17.5	74.5	370	1750
Algeria	2115	24.0	18.0	75.0	380	1800
Algeria	2120	24.5	18.5	75.5	390	1850
Algeria	2125	25.0	19.0	76.0	400	1900
Algeria	2130	25.5	19.5	76.5	410	1950
Algeria	2135	26.0	20.0	76.9	420	2000
Algeria	2140	26.5	20.5	77.3	430	2050
Algeria	2145	27.0	21.0	77.8	440	2100
Algeria	2150	27.5	21.5	78.2	450	2150
Algeria	2155	28.0	22.0	78.6	460	2200
Algeria	2160	28.5	22.5	78.9	470	2250
Algeria	2165	29.0	23.0	79.3	480	2300
Algeria	2170	29.5	23.5	79.7	490	2350
Algeria	2175	30.0	24.0	80.0	500	2400
Algeria	2180	30.5	24.5	80.3	510	2450
Algeria	2185	31.0	25.0	80.6	520	2500
Algeria	2190	31.5	25.5	81.0	530	2550
Algeria	2195	32.0	26.0	81.3	540	2600
Algeria	2200	32.5	26.5	81.6	550	2650
Algeria	2205	33.0	27.0	81.8	560	2700
Algeria	2210	33.5	27.5	82.1	570	2750
Algeria	2215	34.0	28.0	82.4	580	2800
Algeria	2220	34.5	28.5	82.6	590	2850
Algeria	2225	35.0	29.0	82.9	600	2900
Algeria	2230	35.5	29.5	83.1	610	2950
Algeria	2235	36.0	30.0	83.3	620	3000
Algeria	2240	36.5	30.5	83.6		